# Parts List No. P-344

for

South Bend 9-inch Model A
Underneath Motor Driven
Quick Change Gear Lathes



SOUTH BEND LATHE WORKS

South Bend 22, Indiana, U.S.A.

## How to Order Replacement Parts for South Bend Lathes

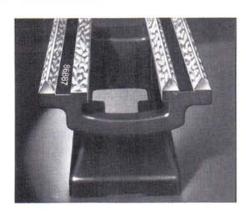
This parts list has been prepared especially for the lathe bearing the serial number which appears on the front cover. It should be considered as a part of the lathe equipment and be kept permanently where it will be readily accessible so the correct part numbers can be given when replacement parts are ordered.

The best way to order replacement parts is to send the old part to the factory with the order. This will avoid delay or possible error.

If it is inconvenient to return the old part, be sure to give the following information:

- (1) Serial number of lathe.
- (2) Correct number and name of part.
- (3) Quantity.
- (4) Specify length of wire, cable, conduit, wicking, or hose as the part number does not indicate length.
- (5) Specify dimensions of gasket material as the part number indicates type of material and thickness only.

If the part needed can not be located in this parts list, send a sketch of the part showing all principal dimensions.



#### Specify Serial Number of Lathe When Ordering Parts

The serial number of each lathe is stamped on top of the lathe bed between the V-way and flat way at the tailstock end. This number is an index to the size, type, and model of the lathe. Always specify the serial number on each order for replacement parts or attachments.

#### Terms and Prices

All orders for replacement parts will be shipped C.O.D. unless remittance in full is sent with the order.

All prices are F.O.B. South Bend, Indiana, and will be quoted on request.

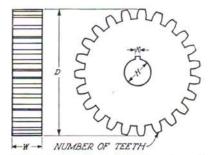
## Special Instructions

#### How to Order Gears

When ordering replacement gears, be sure to give all of the information required as listed and illustrated below.

#### When Ordering Gears Specify-

Serial Number of Lathe Number and Name of Part Quantity Number of Teeth Diameter "D" in Inches Width "W" in Inches Keyway "K" in Inches Hole "H" in Inches



The illustration above shows two views of a gear with parts lettered for use when indicating specifications on your order.

#### How to Order Threaded Parts

When ordering threaded parts, other than commercial parts such as standard screws, bolts, and nuts, be sure to give all of the information required as listed below.

#### When Ordering Threaded Parts Specify—

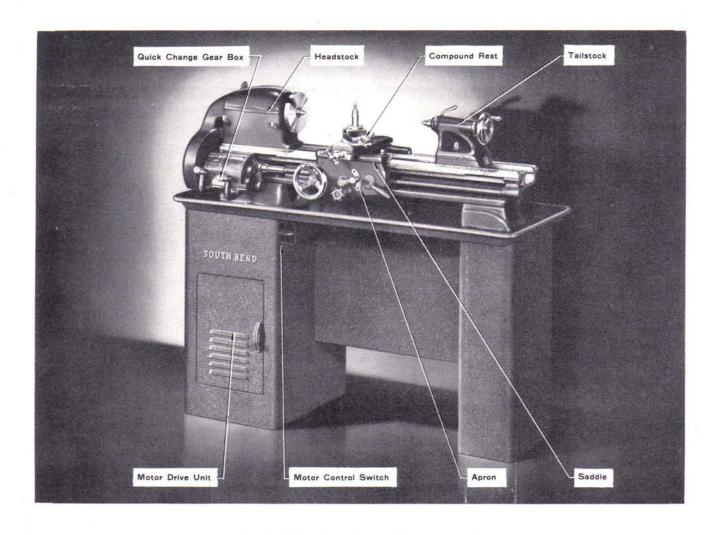
Serial Number of Lathe Number and Name of Part Quantity Outside Diameter of Threads in Inches

Kind of Thread:
Acme Thread
U. S. Standard Thread
Sharp "V" Thread
Right-or Left-hand Thread

Number of Threads per Inch

#### Repair Parts Supplied for South Bend Lathes Only

The lathe parts listed in this parts list can be supplied only for use on South Bend Lathes. We are not in a position to supply parts for other makes of lathes or for use on jigs, fixtures, special machines or equipment.

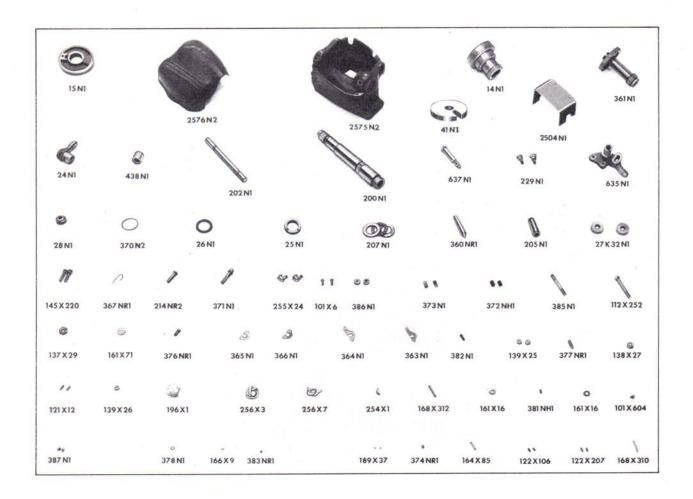


## PARTS LIST NO. P-344

for

# South Bend 9-inch Model A Underneath Motor Driven Quick Change Gear Lathes

Unit	Page	Unit Page	
Headstock	A and 2-B	Motor Drive Unit	В
Quick Change Gear Box 3-	A and 3-B	Tailstock	7
Saddle and Compound Rest		Legs	
Apron	5	Motor Control Switch	



## Headstock Parts

Part No.	Name of Part	Part No.	Name of Part
14N1	Spindle Cone.	161X16	Washer, Left Headstock Stud
15N1	Bull Gear	161X71	Washer, Right Headstock Stud
24N1	Back Gear Lever	164X85	Key, Reverse Bracket Shaft
25N1	Nut, Spindle Take-up	166X9	Shoe, Back Gear
26N1	Washer, Spindle Take-up Nut	168X310	Pin, Eccentric Shaft Bushing
27K32N1	Twin Gears	168X312	Pin, Back Gear Lever
28N1	Reverse Gear	189X37	Shoes, Cone Cover Hinge Screw Set Screw
41N1	Face Plate	196X1	Spindle Bearing Capillary Oiler Wool
101X6	Screws, Bed Belt Pocket Cover	200N1	Spindle
101X604	Screw, Back Gear Oil Hole	202N1	Eccentric Shaft
112X252	Clamping Screw, Right Headstock	205N1	Spindle Sleeve
121X12	Screws, Cone Cover Hinge	207N1	Ball Thrust Bearing
122X106	Set Screws, Cone Cover Hinge Screw	214NR2	Bull Gear Plunger
122X207	Set Screws, Reverse Bracket	229N1	Twin Gear Studs
137X29	Nut, Reverse Shaft	254X1	Bull Gear Key
138X27	Nut, Left Headstock Clamping Screw	255X24	Spindle Bearing Oilers
139X25	Nuts, Twin Gear Stud	256X3	Reverse Bracket Wick
139X26	Nut, Back Gear Lever Stop Screw	256X7	Twin Gear Stud Wick
145X220	Cap Screws, Headstock	360NR1	Headstock Spindle Center (Catalog No. 726-W)
161X16	Washer, Reverse Bracket Lock Screw	361N1	Back Gear

# Headstock Parts

(Continued from Other Side of This Sheet)

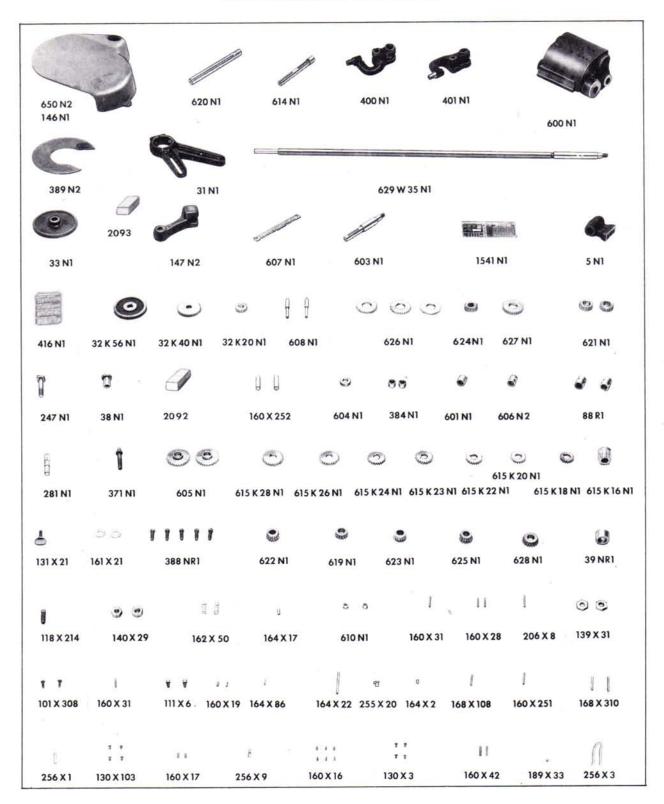
Part No.	Name of Part	Part No.	Name of Part
363N1	Headstock Shim, Large Laminated	381NH1	Screw, Spindle Cone Oil Hole Plug
364N1	Headstock Shim, Large Solid	382N1	Screw, Spindle Take-up Nut
365N1	Headstock Shim, Small Laminated	383NR1	Pin, Spindle Take-up Nut Washer
366N1	Headstock Shim, Small Solid	385N1	Left Headstock Clamping Stud
367NR1	Bull Gear Plunger Spring	386N1	Headstock Oiler Plugs
370N2	Spindle Protecting Ring	387N1	Spindle Cone Cover Bumpers
371N1	Lock Screw, Reverse Bracket	438N1	Eccentric Shaft Bushing, Front
372NH1	Spindle Bearing Capillary Oiler Felts	635N1	Reverse Bracket
373N1	Spindle Bearing Capillary Oiler Springs	637N1	Reverse Bracket Shaft
374NR1	Back Gear Spring	2504N1	Bed Belt Pocket Cover (rear)
376NR1	Set Screw, Back Gear	2575N2	Headstock
377NR1	Screw, Back Gear Stop	2576N2	Spindle Cone Cover
378N1	Washer, Quill Sleeve Oil Hole		THE STANDARD CONTRACTOR OF THE STANDARD CONTRACT

# 9" UNIT CODE QC-101

PAGE 3A

# Quick Change Gear Box Parts

(See List of Parts on Other Side of This Sheet)

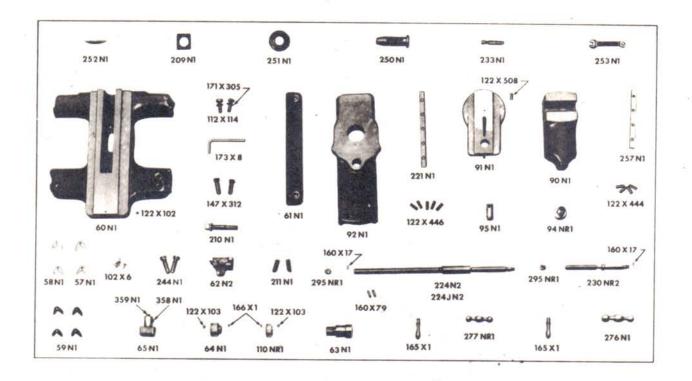


### PAGE 3B 9" UNIT CODE QC-101

# Quick Change Gear Box Parts

(See Illustration of Parts on Other Side of This Sheet)

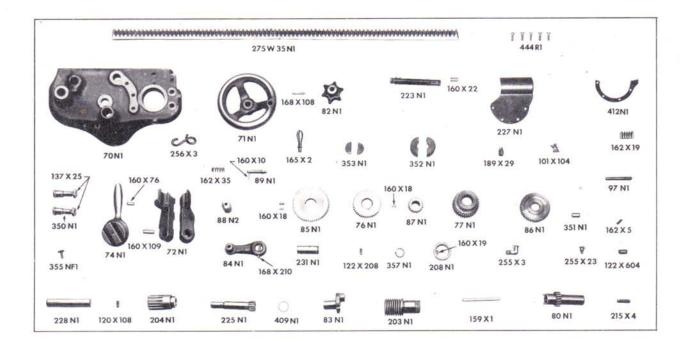
Part No.	Name of Part	Part No.	Name of Part
5N1	Rear Lead Screw Bracket	256X3	Gear Box Felt Wick, Flat
31N1	Change Gear Bracket	256X3	Main Drive Shaft Wicking
32K20N1	Change Gear—20 Teeth	256X9	Wired Cotton Wicking for Gear Box
32K40N1	Change Gear—40 Teeth	281N1	Stud, Change Gear Guard
32K56N1	Change Gear—56 Teeth	371N1	Collar Screw, Change Gear Bracket
33N1	Idler Gear	384N1	Tumbler Idler Gear Bearings
38N1	Idler Gear Bushing	388NR1	Screws, Gear Box
39NR1	Lead Screw Thrust Collar	388NR1	Screws, Lead Screw Bracket
88R2	Tumbler Plunger Knobs	389N2	Change Gear Safety Guard
101X308	Screws, Change Gear Safety Guard	400N1	Gear Box Tumbler (Right)
111X6	Screws, Tumbler Guide Bar	401N1	Gear Box Tumbler (hight)
118X214			
130X3	Set Screw, Gear Guard Bracket	416N1	Lubrication Chart
	Escutcheon Pins, Lubrication Chart	600N1	Gear Box
130X103	Escutcheon Pins, Index Plate	601N1	Cone Gear Shaft Bushing
131X21	Thumb Screw, Gear Guard Bracket	603N1	Main Drive Shaft
139X31	Nuts, Lead Screw	604N1	Main Drive Shaft Collar
140X29	Nut, Idler Gear Bolt	605N1	Tumbler Idler Gears
140X29	Nut, Main Drive Shaft	606N2	Main Drive Shaft Bushing
146N1	Change Gear Guard for Horizontal Motor	607N1	Tumbler Guide Bar
to control trease	Driven Lathes	608N1	Tumbler Plungers
147N2	Change Gear Guard Bracket	610N1	Plunger Bushings
160X16	Pins, Small Compound Gear (Cone Gear Shaft)	614N1	Cone Gear Shaft
160X16	Pins, Small Compound Gear (Main Drive Shaft)	615K16N1	Cone Gear—16 Teeth
160X16	Pins, Tumbler Comp. Gear (Cone Gear Shaft)	615K18N1	Cone Gear-18 Teeth
160X17	Pin, Large Compound Gear (Main Drive Shaft)	615K20N1	Cone Gear—20 Teeth
160X17	Pin, Small Compound Gear (Main Drive Shaft)	615K22N1	Cone Gear—22 Teeth
160X19	Pins, Tumbler Guide Bar	615K23N1	Cone Gear—23 Teeth
160X28	Pins, Tumbler Plunger	615K24N1	Cone Gear—24 Teeth
160X31	Pin, Main Drive Shaft Bushing	615K26N1	Cone Gear—26 Teeth
160X42	Pins, Tumbler	615K28N1	Cone Gear—28 Teeth
160X251	Pin, Cone Gear	619N1	Small Compound Gear (Main Drive Shaft)
160X252	Tumbler Idler Gear Shafts	620N1	Main Pinion Shaft
160X252	Pin, Cone Gear	621N1	Tumbler Gears
161X21	Washer, Idler Gear Bolt	622N1	Tumbler Compound Gear (Cone Gear Shaft).
161X21	Washer, Main Drive Shaft	623N1	Small Compound Gear (Cone Gear Shaft)
162X50	Springs, Tumbler Plunger Knob	624N1	Cone Shaft Gear
164X2	Key, Lead Screw	625N1	Small Compound Gear (Main Drive Shaft)
164X17		626N1	
164X22	Key, Main Drive Shaft (Large)		Large Compound Gears (Cone Gear Shaft)
	Key, Cone Gear Shaft	627N1	Large Compound Gear (Main Drive Shaft)
164X86	Key, Main Drive Shaft (Small)	628N1	Lead Screw Gear
168X108	Pin, Main Drive Shaft Collar	629W3N1	Lead Screw for 3-foot Bed
168X310	Pin, Cone Gear	629W35N1	
168X310	Pin, Lead Screw Thrust Collar	629W4N1	Lead Screw for 4-foot Bed
189X33	Gear Box Expansion Plug	629W45N1	Lead Screw for 4½-foot Bed
206X8	Tumbler Pinion Shaft	650N2	Change Gear Guard for Underneath Moto
247N1	Bolt, Idler Gear:		Driven Lathes
255X20	Gear Box Oiler	1541N1	Index Plate
256X1	Cone Gear Shaft Wicking	2092	Babbitt for Rear Lead Screw Bracket
256X1	Tumbler Pinion Shaft Wicking	2093	Babbitt for Change Gear Guard Bracket



# Saddle and Compound Rest Parts

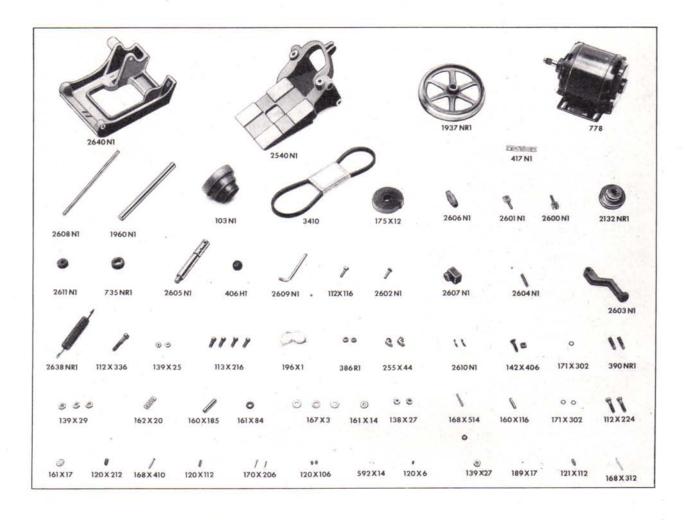
Part No.	Name of Part	Part No.	Name of Part
57N1	Wiper Retainers, Left Front and Right Rear	165X1	Compound Rest Handle
58N1	Wiper Retainers, Right Front and Left Rear	165X1	Cross-Feed Handle
59N1	Felt Wipers	166X1	Compound Rest Graduated Collar Screw Shoe
60N1	Saddle	166X1 °	Cross-Feed Graduated Collar Screw Shoe
61N1	Saddle Gib	171X305	Lock Washers, Saddle Gib Screw
62N2	Saddle Lock	173X8	Compound Rest Wrench
63N1	Cross-Feed Bushing	209N1	Tool Post Block
64N1	Cross-Feed Graduated Collar	210N1	Collar Screw, Carriage Lock
65N1 *	Nut, Cross-Feed	211N1	Compound Rest Clamping Shoes
90N1	Compound Rest Top	221N1*	Compound Rest Base Gib
91N1	Compound Rest Swivel	224JN2	Cross-Feed Screw for Model C Lathes
92N1*	Compound Rest Base	224N2	Cross-Feed Screw for Model A and B Lathes
94NR1	Compound Rest Bushing	230NR2	Screw, Compound Rest
95N1	Nut, Compound Rest	233N1	Screw, Tool Post
102X6	Screws, Felt Retainer	244N1	Screws, Apron to Saddle
110NR1	Compound Rest Graduated Collar	250N1	Tool Post
112X114	Screws, Saddle Gib	251N1	Tool Post Ring
122X102	Screw, Saddle Oil Hole	252N1	Tool Post Wedge
122X103	Screw, Compound Rest Graduated Collar	253N1	Tool Post Wrench
122X103	Screw, Cross-Feed Graduated Collar	257N1	Compound Rest Top Gib
122X444	Screws, Compound Rest Top Gib	276N1	Cross-Feed Ball Crank
122X446	Screws, Compound Rest Base Gib	277NR1	Compound Rest Ball Crank
122X508	Screw, Compound Rest Swivel	295NR1	Nut, Compound Rest Ball Crank
147X312	Lock Screws, Compound Rest	295NR1	Nut, Cross-Feed Ball Crank
160X17	Pin, Compound Rest Screw	358N1	Pin, Cross-Feed Nut Lock
160X17	Pin, Cross-Feed Screw	359N1	Screw, Cross-Feed Nut Lock Pin
160X79	Pins, Saddle Lock		

<sup>\*</sup> Not used with Taper Attachment, see Taper Attachment page.



# Apron Parts

Part No.	Name of Part	Part No.	Name of Part
70N1	Apron	162X35	Spring, Shifter Plunger
71N1	Handwheel	165X2	Handwheel Handle
72N1	Half-Nuts	168X108	Pin, Handwheel
74N1	Half-Nut Cam	168X210	Pin, Idler Gear Shifter Lever
76N1	Rack Pinion Gear	189X29	Plug, Reservoir
77N1	Worm Gear	203N1	Apron Worm
80N1	Clutch Sleeve	204N1	Rack Pinion
82N1	Clutch Knob	208N1	Worm Collar
83N1	Idler Gear Shifter	215X4	Half-Nut Oil Tube
84N1	Idler Gear Shifter Lever	223N1	Screw, Clutch
85N1	Cross-Feed Compound Gear	225N1	Handwheel Pinion
86N1	Idler Gear	227N1	Oil Trough
87N1	Cross-Feed Compound Pinion	228N1	Stud, Rack Pinion
88N2	Idler Gear Shifter Knob	231N1	Cross-Feed Compound Gear Shaft
89N1	Idler Gear Shifter Plunger	255X3	Oiler, Reservoir
97N1	Feed Interlock Plunger	255X23	Oiler, Handwheel
101X104	Screws, Oil Trough	256X3	Oil Wick, Apron Worm
120X108	Set Screw, Rack Pinion Stud	275W3N1	Rack (for 3' bed)
122X208	Set Screw, Cross-Feed Compound Gear Shaft.	275W35N1	Rack (for 3½' bed)
122X604	Set Screw, Cam Retainer Pin	275W4N1	Rack (for 4' bed)
137X25	Nuts, Half-Nut Stud	275W45N1	Rack (for 4½' bed)
159X1	Key, Worm	350N1	Shoulder Screws, Half-Nut
160X10	Pin, Idler Gear Shifter Plunger	351N1	Retainer Pin, Half-Nut Cam
160X18	Pins, Cross-Feed Compound Pinion	352N1	Clutch Shoe
160X18	Pin, Rack Pinion Gear	353N1	Clutch Shoe Expanders
160X19	Pin, Worm Collar	355NF1	Screw, Clutch Knob
160X22	Pins, Clutch Screw	357N1	Spring, Cross-Feed Compound Gear Shaft
160X76	Stop Pin, Half-Nut Cam	409N1	Spring, Handwheel Pinion
160X109	Pins, Half-Nut	412N1	Oil Trough Gasket
162X5	Spring, Cam Retainer	444R1	Screws, Rack
162X19	Spring, Clutch Sleeve		***



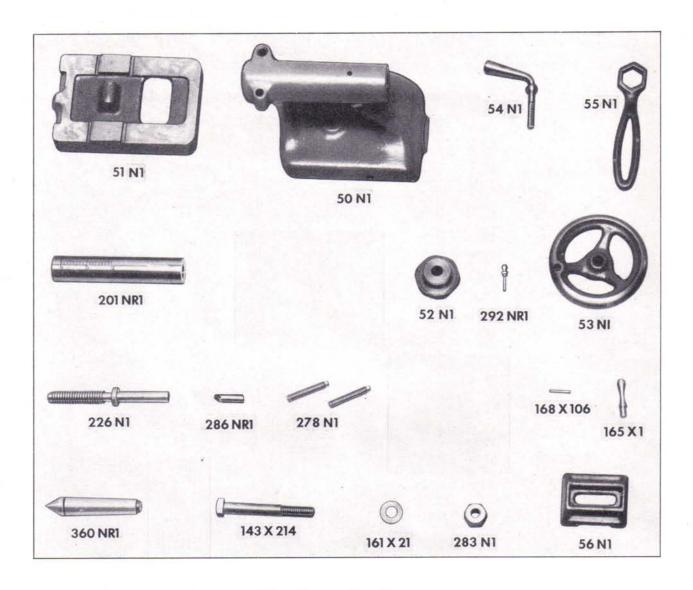
## Motor Drive Unit Parts

Part No.	Name of Part	Part No.	Name of Part
103N1	Countershaft Cone	161X14	Belt Tension Spring Screw Washer
112X116	Belt Tension Spring Screw	161X17	Belt Tension Crank Pin Washer
112X224	Cone Cradle Support Screws	161X84	Cone Cover Lock Pin Fibre Washer
112X336	Cone Cover Lock Pin Bracket Screw	162X20	Cone Cover Lock Pin Spring
113X216	Motor Screws	167X3	Cone Cradle Support Screw Washers
120X6	Belt Tension Turnbuckle Set Screw	168X312	Cone Cover Lock Pin Collar Pin
120X106	Belt Tension Crankshaft Set Screw	168X410	Belt Tension Crank Pin
120X106	Countershaft Cone Shaft Collar Set Screw	168X514	Countershaft Drive Pulley Pin
120X112	Combination Motor Pulley Set Screw	170X206	Belt Tension Spring Pin Cotter Pin
120X212	Countershaft Cone Set Screw	170X206	Belt Tension Spring Crank Pin Cotter Pin
121X112	Belt Tension Crankshaft Set Screw	171X302	Cone Cradle Screw Lock Washers
138X27	Cone Cradle Support Screw Nuts	175X12	Countershaft to Headstock Leather Belt
139X25	Belt Tension Crankshaft Set Screw Nut	189X17	Belt Tension Crankshaft Turnbuckle Set Screw
139X25	Belt Tension Spring Screw Nut		Shoe
139X27	Countershaft Cone Set Screw Nut	196X1	Cone Cradle Oiler Wool
139X29	Cone Cradle Support Pivot Screw Nuts	255X44	Cone Cradle Oilers
142X406	Cone Cradle Support Screw (Short) and Nut.	386R1	Cone Cradle Oiler Plugs
160X116	Belt Tension Crankshaft Pin	390NR1	Cone Cradle Support Pivot Screws
160X185	Lock Pin	406H1	Belt Tension Crankshaft Lever Handle Knob.

## Motor Drive Unit Parts

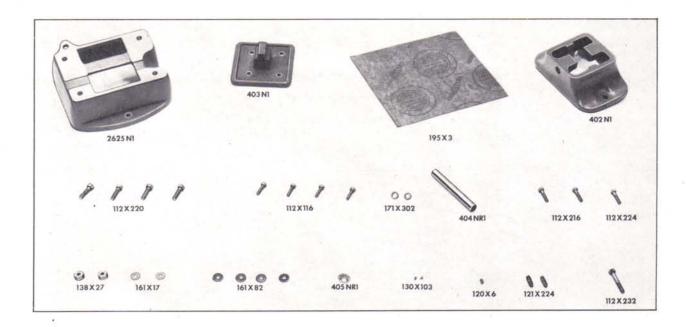
(Continued from Other Side of This Sheet)

Part No.	Name of Part	Part No.	Name of Part
417N1	Belt Tension Release Plate	2601N1	Left Belt Tension Rod
592X14	Belt Release Plate Escutcheon Pins	2602N1	Belt Tension Spring Pin
735NR1	Countershaft Cone Shaft Collar	2603N1	Belt Tension Crank
778	Motor (state make, h.p., cycle, r.p.m., voltage,	2604N1	Belt Tension Spring Crank Pin
	phase, and A.C. or D.C.)	2605N1	Belt Tension Crankshaft
1937NR1	Countershaft Drive Pulley	2606N1	Belt Tension Turnbuckle
1960N1	Countershaft Cone Shaft	2607N1	Cone Cover Lock Pin Bracket
2130NR1	Combination Motor Pulley (for ½"	2608N1	Cone Cover Lock Pin
	motor shaft)	2609N1	Belt Tension Crankshaft Lever Handle
2131NR1	Combination Motor Pulley (for 5/8"	2610N1	Cone Cradle Oiler Springs
	motor shaft)	2611N1	Cone Cover Lock Pin Collar
2132NR1	Combination Motor Pulley (for 3/4"	2638NR1	Belt Tension Spring
	motor shaft)	2640N1	Cone Cradle Support
2540N1	Cone Cradle	3410	V-Belt, Motor Pulley to Countershaft
2600N1	Right Belt Tension Rod		



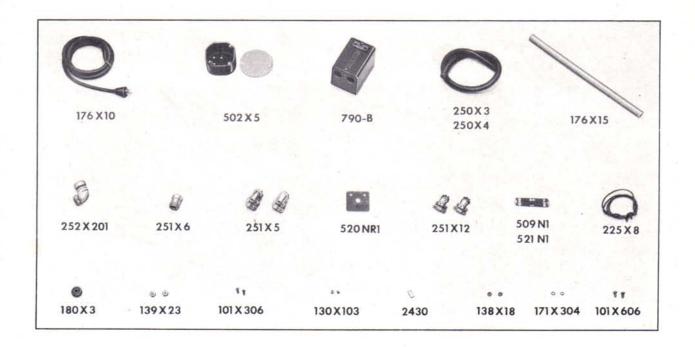
## Tailstock Parts

Part No.	Name of Part	Part No.	Name of Part
50N1	Top	165X1	Handwheel Handle
51N1	Base	168X106	Pin, Handwheel
52N1	Nut, Spindle Screw	201NR1	Spindle
53N1	Handwheel	226N1	Screw
54N1	Binding Lever	278N1	Set Screws, Set-Over
55N1	Wrench	283N1	Nut, Clamp Bolt
56N1	Clamp	286NR1	Key, Spindle
143X214	Clamp Bolt	292NR1	Plug, Oil Reservoir
161X21	Washer, Clamp Bolt	360NR1	Center (Catalog No. 726-W)



# Bench Leg Parts

Part No.	Name of Part	Part No.	Name of Part
112X116	Screw, Bench Leg Top	161X17	Washers, Headstock Bench Leg Screw
112X216	Screws, Bench Leg Base	161X82	Lead Washers, Leg Screw
112X220	Screws, Headstock Bench Leg	171X302	Lock Washers, Headstock Bench Leg Screw
112X224	Screw, Headstock Bench Leg	195X3	Gasket, Headstock Bench Leg
112X232	Screw, Headstock Bench Leg	402N1	Tailstock Bench Leg Base
120X6	Set Screw, Tailstock Bench Leg Shaft	403N1	Tailstock Bench Leg Top
121X224	Set Screws, Bench Leg Base	404NR1	Tailstock Bench Leg Shaft
121X232	Screws, Tailstock Bench Leg Leveling	405NR1	Leveling Screw Plate
130X103	Escutcheon Pins, Leveling Plate	2625N1	Headstock Bench Leg
138X27	Nuts, Headstock Bench Leg Screw		



## Motor Control Switch Parts

(A. C. and D. C.)

Part No.	Name of Part	Part No.	Name of Part
101X306	Screws, Switch	251X5*	Conduit Connectors, 90°
101X606	Screws, Outlet Box	251X6	Conduit Connector, Straight
130X103	Escutcheon Pins, Switch Plate	251X12**	Conduit Connectors, 90°
138X18	Nuts, Switch Screw	252X201	Conduit Elbow
139X23	Nuts, Outlet Box Screw	502X5	Outlet Box
171X304	Lock Washers, Switch Screw	509N1*	Switch Plate
176X10*	Rubber Cord Set	520NR1	Switch Spacer
176X15	Thinwall Conduit	521N1**	Switch Plate
180X3*	Grommet, Rubber Switch	790B	Switch
225X8	Wire, Stranded Insulated	2430	Switch Knob Spacer
250X3*	Wire, 4—Conductor		* omit for D. C.
250X4**	Wire, 5—Conductor		* * omit for A.C.